# School Food Activist

Performance Task

## Introduction

The local food movement is growing across the United States. "Local food" can mean different things to different people but most agree local food is grown within 100 miles of your community. There are many reasons why buying fresh, local food from your community is important. People like to know where their food comes from and how it is grown. Buying from farmers in your own community supports the local economy and the food often tastes better when it does not have to be shipped in from far away. Local foods can be purchased at farmers markets, farm stands or even directly from the farm through programs like Community Supported Agriculture boxes (CSAs).

School lunch can also help introduce young people to foods grown and raised in their local communities when local foods are used in cafeteria meals or students pack local foods in their lunch boxes. More and more schools are serving locally grown foods, with some even planting their own school gardens to help students make healthier food choices.

Through this task, individuals and teams will take on the role of a school food activist, raising awareness of the importance of eating fresh, local foods during the school day. The solutions you propose will support the local farmers and help students make healthier choices.

## Big Idea / Essential Questions

### Big Idea

- Scientists examine cause and effect to see relationships between organisms, places, things, ideas, and events.
- Scientists recognize and analyze multiple points of view to explain the ideas and actions of individuals and groups.

### Essential Questions

- Where does food come from?
- How does eating locally impact the physical environment?

## G.R.A.S.P.

## Goal

Your goal is to provide information to students and staff to raise awareness of the importance of eating fresh, local foods in the school and community

# Role

You are a school food activist. You research and communicate ideas about where food comes from and why what we choose to eat is important for the community and environment.

# Audience

Your audience will be food services staff who make decisions about what is served for school meals.

# Situation

School lunch can help introduce young people to foods grown and raised in their local communities. Students and their families may be more likely to buy local foods from farmers if they are introduced to them in school. More and more schools are serving locally grown foods, with some even planting their own school gardens to help students make healthier food choices.

Students in your school may not know much about where their food comes from or how it is grown. They may not realize that buying from farmers in your community supports the local economy and the food often tastes better when it does not have to be shipped in from far away. You will help them become more informed and make healthier choices when purchasing school lunch.

## Products

# 1. Cafeteria Foods Line Plot

To determine how popular cafeteria meals and snacks are, you class is going to collect data for a week. Display a class chart which has all students listed along with the days of the week. Every student will need to record their cafeteria food purchases as follows:

- If a whole meal is purchased, that is represented as a 1
- If just snacks are purchases, that is represented as Â¼ for each snack.

For example, Emma purchases lunch on Tuesday and Thursday. She also buys 1 snack on Thursday. On Wednesday she buys only 2 snacks, and on Friday she buys only 1 snack. Her purchases would be displayed as:

| Name | Mon | Tues | Wed | Thurs | Fri | Total |
|------|-----|------|-----|-------|-----|-------|
| Emma | 0 | 1 | $\frac{2}{4}$ | $1\frac{1}{4}$ | $\frac{1}{4}$ | |

Once all of the data is collected for the entire class, find the totals for each student. At the bottom of the class chart write the names of the students who purchased the most and the least from the cafeteria for the week.

To display these data in an easy-to-read format, you will create a line plot of the numbers in the total columns. Remember that your line plot must have one X (or dot) for each student. Create and write some questions that can easily be answered by

looking at the data on your line plot. Have students from mother groups answer your questions and check to make sure they are correct.

- For your data, are you considering milk or juice from the cafeteria as a snack?
- How would you represent someone on the chart who does not buy anything from the cafeteria that week?
- In this scenario, how many snacks would equal one meal mathematically?

## Cafeteria Foods Line Plot

| Achievement Levels | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| **Adding Fractions** (x1) | Product shows few correct work and solutions when adding fractions and mixed numbers. | Product shows some correct work and solutions when adding fractions and mixed numbers. | Product shows most correct work and solutions when adding fractions and mixed numbers. | Product shows all correct work and solutions when adding fractions and mixed numbers. |
| **Comparing Fractions** (x1) | Product shows correct comparisons of few fractions or mixed numbers used. | Product shows correct comparisons of some fractions and mixed numbers used. | Product shows correct comparisons of most fractions and mixed numbers used. | Product shows correct comparisons of all fractions and mixed numbers used. |
| **Line Plot Details** (x1) | Line plot is constructed in a way that makes the data difficult to read or interpret. | Line plot is somewhat constructed using appropriate scale, labels and title. | Line plot is adequately constructed using appropriate scale, labels and title, and is easy to read and analyze the displayed data. | Line plot is thoroughly constructed using appropriate scale, labels and title, and is easy to read and analyze the displayed data. |
| **Data Analysis Questions** (x1) | Two or fewer questions are created that can be answered using the data displayed. | Few questions are created that can be answered using the data displayed. Some of the answers to these questions are correctly provided. | Several questions are created that can be answered using the data displayed. Most of the answers to these questions are correctly provided. | Many in-depth questions are created that can be answered using the data displayed. All correct answers to these questions are provided. |

# 2. Local Produce Information Card

Local regions often specialize in types of foods that thrive on the environmental characteristics of the area. Sometimes these specialties are known to locals, but sometimes they are also shipped away to other areas. Keeping the food produced in the local area can make it cost less and often means it tastes better because it is fresh.

You will need to research the foods unique to your region and choose one item you would like to highlight on an information card. The information card can be print or digital. It will be used by food services professionals and local families to encourage the use of local foods. The information card should include the structures that make it grow well in the local area, including climate and other environmental characteristics that support survival, growth, behavior and reproduction. The card should also include when the food is available seasonally, where it can be purchased and types of dishes it can be used in. Be sure to include why it is important to buy and eat local foods.

Research the price of your food if it is grown locally, and the same if it is bought at stores where it is not local. Include the price if the food is purchased locally compared to the price of the same item at different stores. Show all of these prices as math comparisons (<, >, =) on your Information card.

- What are the conditions that help specific foods survive and thrive locally?
- How do the internal and external structures of plants and animals function to support survival, growth, behavior and reproduction?
- What are the costs and benefits individuals consider when deciding what to buy?

## Local Produce Information Card

| Achievement Levels | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| **Economic Concepts** (x1) | Product shows little understanding of the benefits and costs of individual choices and the positive and negative incentives that influence people to buy local foods. | Product shows partial understanding of the benefits and costs of individual choices and the positive and negative incentives that influence people to buy local foods. | Product shows sufficient understanding of the benefits and costs of individual choices and the positive and negative incentives that influence people to buy local foods. | Product shows thorough understanding of the benefits and costs of individual choices and the positive and negative incentives that influence people to buy local foods. |
| **Comparing Decimals** (x1) | Product shows correct comparisons of few of the decimals. | Product shows correct comparisons of some of the decimals using appropriate inequality symbols. | Product shows correct comparisons of most of the decimals using appropriate inequality symbols. | Product shows correct comparisons of all decimals using appropriate inequality symbols. |
| **Research** (x1) | Product demonstrates a lack of research conducted around the topic. | Product demonstrates that some research was conducted around the topic. | Product demonstrates that research was conducted around the topic using few credible or appropriate sources. | Product demonstrates that thorough research was conducted around the topic using several credible and appropriate sources. |
| **Organization** (x1) | The product is somewhat neat but unorganized. The reader has a hard time following and understanding the important information. | The product is somewhat neat and organized. The reader can partially follow and understand the important information. | The product is mostly neat and organized. The reader can follow and understand the important information. | The product is neat and organized. It is easy for the reader to follow and understand the important information. |

# 3. School Garden Design

Many schools across the country are creating teaching gardens to help students understand where food comes from and experience the rewards of growing their own foods. School gardens can teach many skills and can help students make healthier food choices. You will need to create a plan for a raised bed garden. You have enough soil to make a rectangular garden that has an area of 100 square feet.

You first need to brainstorm all of the different lengths and widths that your garden can be. Once you have listed all of the possibilities, your group needs to decide on one design to actually create and use.

Once you have decided on your garden's measurements, choose at least 3 different foods you would like to grow in your school's garden based on what you have learned grows well in your local area. How much space will each of these take in your garden?

On your design, show the parts of each food and label them. Determine what fraction each food takes of the total garden area.

Which food uses the most area? Which uses the least? Do any of the foods have the same area?

Show these comparisons using the fractions for each and the symbols (<, >, =).

- What is the length, width and area of your school garden?
- Which foods will you grow and why?
- How can these foods be used by your school's cafeteria?

## School Garden Design

| Achievement Levels | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| **Factor Pairs** (x1) | Design Plan only shows one correct factor pair of 100. | Design Plan correctly shows less than half of the factor pairs of 100. | Design Plan correctly shows most of the factor pairs of 100. | Design Plan correctly shows all of the factor pairs of 100. |
| **Fractional Models** (x1) | Product shows very little understanding of fraction concepts by representing few sections as accurate fractions. | Product shows some understanding of fraction concepts by representing some sections as accurate fractions. | Product shows adequate understanding of fraction concepts by representing most sections as accurate fractions. | Product shows strong understanding of fraction concepts by representing each section as an accurate fraction. |
| **Comparing Fractions** (x1) | Product shows correct comparisons of few fractions used. | Product shows correct comparisons of some fractions used. | Product shows correct comparisons of most fractions used. | Product shows correct comparisons of all fractions used. |
| **Measurement & Area** (x1) | Product shows minimal understanding of area and measurements through inaccurate/incomplete calculations and units. | Product shows some understanding of area and measurements through partially accurate calculations and units. | Product shows satisfactory understanding of area and measurements through mostly accurate calculations and units. | Product shows thorough understanding of area and measurements through accurate calculations and units. |
| **Design Details** (x1) | Design contains few of the required sections. | Design is fairly neat and contains some of the required sections. Few labels are included. | Design is neat and contains most of the required sections. Most of the labels are included. | Design is very neat and contains all of the required sections. Labels are used throughout to make the design easy to understand. |